

SEQUENCE LISTING

<110> Kay, Mark A.
Yant, Stephen

<120> Methods of In Vivo Gene Transfer Using a
Sleeping Beauty Transposon System

<130> STAN-160CIP

<150> 60/162,279

<151> 1999-10-28

<150> 09/440,301

<151> 1999-11-17

<160> 19

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<212> PRT

<213> Artificial Sequence

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<223> recombinant transposase

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Asp	Leu	His	Lys	Ser	Gly	Ser	Ser	Leu	Gly	Ala	Ile	Ser	Lys	Arg	Leu
			20					25					30		
Lys	Val	Pro	Arg	Ser	Ser	Val	Gln	Thr	Ile	Val	Arg	Lys	Tyr	Lys	His
			35				40					45			
His	Gly	Thr	Thr	Gln	Pro	Ser	Tyr	Arg	Ser	Gly	Arg	Arg	Arg	Val	Leu
	50					55					60				
Ser	Pro	Arg	Asp	Glu	Arg	Thr	Leu	Val	Arg	Lys	Val	Gln	Ile	Asn	Pro
65					70					75				80	
Arg	Thr	Thr	Ala	Lys	Asp	Leu	Val	Lys	Met	Leu	Glu	Glu	Thr	Gly	Thr
				85					90					95	
Lys	Val	Ser	Ile	Ser	Thr	Val	Lys	Arg	Val	Leu	Tyr	Arg	His	Asn	Leu
			100					105					110		
Lys	Gly	Arg	Ser	Ala	Arg	Lys	Lys	Pro	Leu	Leu	Gln	Asn	Arg	His	Lys
			115				120					125			
Lys	Ala	Arg	Leu	Arg	Phe	Ala	Thr	Ala	His	Gly	Asp	Lys	Asp	Arg	Thr
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Phe	Trp	Arg	Asn	Val	Leu	Trp	Ser	Asp	Glu	Thr	Lys	Ile	Glu	Leu	Phe
145					150					155				160	
Gly	His	Asn	Asp	His	Arg	Tyr	Val	Trp	Arg	Lys	Lys	Gly	Glu	Ala	Cys
			165					170					175		
Lys	Pro	Lys	Asn	Thr	Ile	Pro	Thr	Val	Lys	His	Gly	Gly	Gly	Ser	Ile
			180					185					190		
Met	Leu	Trp	Cys	Gly	Phe	Ala	Ala	Gly	Gly	Thr	Gly	Ala	Leu	His	Lys
			195				200					205			

Ile	Asp	Gly	Ile	Met	Arg	Lys	Glu	Asn	Tyr	Val	Asp	Ile	Leu	Lys	Gln
210						215					220				
His	Leu	Lys	Thr	Ser	Val	Arg	Lys	Leu	Lys	Leu	Gly	Arg	Lys	Trp	Val
225					230					235					240
Phe	Gln	Met	Asp	Asn	Asp	Pro	Lys	His	Thr	Ser	Lys	Val	Val	Ala	Lys
				245					250					255	
Trp	Leu	Lys	Asp	Asn	Lys	Val	Lys	Val	Leu	Glu	Trp	Pro	Ser	Gln	Ser
			260					265					270		
Pro	Asp	Leu	Asn	Pro	Ile	Glu	Asn	Leu	Trp	Ala	Glu	Leu	Lys	Lys	Arg
		275					280					285			
Val	Arg	Ala	Arg	Arg	Pro	Thr	Asn	Leu	Thr	Gln	Leu	His	Gln	Leu	Cys
	290					295				300					
Gln	Glu	Glu	Trp	Ala	Lys	Ile	His	Pro	Thr	Tyr	Cys	Gly	Lys	Leu	Val
305					310					315					320
Glu	Gly	Tyr	Pro	Lys	Arg	Leu	Thr	Gln	Val	Lys	Gln	Phe	Lys	Gly	Asn
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Ala	Thr	Lys	Tyr												
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tgtgcatgac acaagtcatt tttccaacaa ttgtttacag acagattatt tcacttataa
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120

aactgacctt aagacagggg atctttactc ggattaaatg tcaggaattg tgaaaaagt
180

agtttaatgt atttggctaa ggtgtatgta aacttccgac ttcaactg
228

1